AMENDMENT TO THE CLAIMS

Claims 1-18 (canceled)

19. (New) Process for manufacture of soluble branched polymers of glucose essentially containing no β-glucosidic bonds, wherein:

a) an aqueous solution of starch or of starch derivative of dry matter of at least 1% by weight, preferably 1 to 50% by weight, is subjected to a temperature greater than 130°C, under a pressure of more than 3.5 bars, for at least 2 mins,

b) the starch or starch derivative thus obtained is treated with 50 to 2,000 units of purified branching enzyme at a temperature lying between 25 and 50°C for a duration from 10 mins to 24 hrs, and

c) the branched polymers of glucose thus obtained are collected.

20. (New) Process for manufacture of soluble branched polymers of glucose essentially containing no β-glucosidic bonds according to Claim 19, wherein:

a) an aqueous solution of starch or of starch derivative of dry matter of 1 to 50% by weight is subjected to a temperature lying between 140 and 150°C, under a pressure lying between 4 and 5 bars, for 2 to 5 mins,

b) the starch or starch derivative thus obtained is treated with 50 to 2,000 units of purified branching enzyme at a temperature of 30°C, for a duration from 10 mins to 24 hrs, and

c) the branched polymers of glucose thus obtained are collected.

21. (New) Process for manufacture of soluble branched polymers of glucose according to Claim 19, wherein the branching enzyme is selected from the group consisting of glycogen branching enzymes, starch branching enzymes and any mixtures of these enzymes.

22. (New) Process for manufacture of soluble branched polymers of glucose according to Claim 19, wherein the branching enzyme is extracted from organisms and/or from microorganisms selected from the group consisting of higher plants, yeasts, bacteria and unicellular algae.

23. (New) Process for manufacture of soluble branched polymers of glucose according to Claim 19, wherein the branching enzyme is extracted unicellular algae.

24. (New) Process for manufacture of soluble branched polymers of glucose according to Claim 23, wherein the branching enzyme extracted from algae is obtained by isolation from a genetically modified organism capable of expressing the said enzyme.

25. (New) Soluble branched polymers of glucose containing essentially no β-glucosidic bonds obtained according to the process of claim 19, having:

- between 2.5 and 10% of α-1,6 glucosidic bonds,
- a very low or zero tendency to retrograde in aqueous solution, determined according to a test A,
- a Mw determined according to a test C at a median value of the molecular weight distribution profile lying between 10^4 and 10^8 daltons, and

- a reducing sugar content of at most 9%.

26. (New) Soluble branched polymers of glucose according to Claim 25, having a viscosity determined according to a test B of at most 5,000 cP.

27. (New) Soluble branched polymers of glucose according to Claim 25, having:

- between 2.5 and 5% of α-1,6 glucosidic bonds,
- a Mw determined according to a test C at a median value of the molecular weight distribution profile lying between 10^5 and 10^6 daltons,
- a reducing sugar content of at most 1%.

28. (New) Soluble branched polymers of glucose according to Claim 25, having:

- between 5 and 10% of α-1,6 glucosidic bonds,
- a Mw determined according to a test C at a median value of the molecular weight distribution profile lying between 10^7 and 10^8 daltons, and
- a reducing sugar content of at most 1%.

29. (New) Compositions intended for use in Paper-Cardboard, Textiles, Pharmaceuticals, Cosmetics and Food industries, containing soluble branched polymers of glucose according to Claim 25 or capable of being obtained according to Claim 19.

30. (New) Compositions intended for use in Food industries, containing soluble branched polymers of glucose according to Claim 25 or capable of being obtained according to Claim 19.